Exploring the influence of Artificial Intelligence on Consultant's professional identity: A Qualitative Study

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ABSTRACT,

This research examines the impact of Artificial Intelligence (AI) on consultant's professional identity. With the emergence of AI in the consulting business, it becomes essential for consultants to understand how to effectively utilize it while at the same time upholding the unique skills and qualities consultants in their role as knowledge workers have. Despite previous research addressing AI's integration in consulting, further investigation is needed to understand the complex and multifaceted interplay between AI and consultant's professional identity. The Research Question (RQ) for this qualitative study was: "In what ways does Artificial Intelligence impact the consultant's professional identity?". To address this RQ, semi-structured interviews were conducted in an online environment. Using purposive sampling, a total of 15 consultants who work or have worked with AI were selected for interviews. After analyzing the interview-data using thematic analysis via the Gioia method, the most interesting and striking findings include the profound transformation of consultant roles, the tailored AI-related skills and qualities required of consultants, the urgent need to address challenges of AI integration, and the enduring recognition of human consultant's value in the face of AI's implementation in consulting. These insights enhance our understanding of AI's influence on consultant's professional identity, providing theoretical implications that contribute to existing literature and practical implications guiding AI integration in consulting while preserving human consultants' unique strengths.

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1. Introduction

In the last 5 – 10 years, the use, demand, and development of Artificial Intelligence (AI) increased in many different fields of application (Bader & Kaiser, 2019). AI refers to the ability of machines that would usually require human intelligence, such as learning from experience, decision-making, and recognizing speech. To analyze data, recognizing patterns, and make predictions or recommendations based on that data, AI employs computer programs and algorithms (Russell, 2010). Typically, AI is trained with vast quantities of data, from which it learns by identifying patterns. Companies and institutions from sectors like Technology, Education, Business Services, Manufacturing, and Finance are implementing AI-based solutions into their business processes (Richter, 2023). They are doing so by either developing it in-house, acquiring start-ups that are offering products or services based on AI, or buying Software-as-a-Service (SaaS) from software providers.

More recently, AI has expanded its reach into previously unexplored domains. With the new application called "ChatGPT", a chatbot that produces a text-based conversation system that learns from its mistakes based on machine learning, users can have a conversation with or ask for advice. It is also able to help with complex problems or inquiries and is able to learn from mistakes (OpenAI, 2022). This type of application has the potential to play a significant role in the future of the business world. Part of that is also the consulting industry, where AI can have a huge impact (Frey et al., 2013).

The consulting industry is one of the biggest professional services industries, generating approximately \$100 billion to \$300 billion in revenues (Consultancy.org, n.d.). Although offering a broad range of services, the six main offerings are Strategy Consulting, Management Consulting, Operations Consulting, Financial Advisory, HR consulting, and Technology Consulting. However, most consultants work as freelancers (+/- 85%), followed by those working for SMEs (+/- 13%), and those working for the top consulting firms like the so-called 'big four' (KPMG, PwC, E&Y, Deloitte), approximately 2%. This research is focused on the influence of AI on consultant's professional identity, which is why it is important to consider that AI is said to have the potential to improve the consulting processes by providing data-driven insights, automating routine tasks, and enabling consultants to make well-informed decisions (Davenport & Ronanki, 2018; Frey et al., 2013). AI may enhance important business needs in the form of automated business processes such as back office administrative and financial activities, while it can also support gaining profound insights through extensive data analysis and engaging with customers and employees (Davenport & Ronanki, 2018). Moreover, consultancy firms assert that their industry presents a crucial domain for AI application, owing to its profound effects on multiple facets of the consulting business, which may even confer a competitive edge (PwC, 2019). For example, it was claimed that AI is able to enhance the decision-making process in consulting firms by providing real-time insights and data-driven recommendations, which can lead to improved

outcomes and thus higher customer satisfaction (PwC, 2019). Also, it was suggested that companies that adopt AI technologies are likely to outperform competitors in terms of market valuation, profitability, and revenue growth (McKinsey&Company, 2017). Having introduced the potential impact of AI on the consulting industry, it is not of less importance to consider and present the professionals working in that industry.

Consultants are professionals working in the consulting business. They are considered knowledge workers since their main strengths are the application of knowledge, analysis, and creativity to solve complex problems (Drucker, 1959). Knowledge work refers to the use of problem-solving skills and the capacity to adapt to new challenges in creative ways, often in situations of high uncertainty (Alvesson, 2004). It involves expert thinking, complex communication, and analytical reasoning, all of which are essential aspects of the knowledge work (Brinkley & Work, 2009). The opposite of knowledge work is manual labor, which involves physical tasks such as manufacturing, construction, and agriculture. Manual labor has become increasingly automated and thus declined as a share of employment in developed countries (Avent, 2016). To contrast knowledge work and manual labor, Avent said that "manual labor is becoming ever more unimportant; knowledge work is becoming ever more important" (Avent, 2016, p. 44). This statement reflects the shift in modern economy where the increasing significance of knowledge-based tasks and technologies diminishes the relative importance of manual labor. Consultants are a good example of knowledge workers since they rely on their expert thinking and analytical reasoning (Susskind & Susskind, 2015).

Given their professional status, consultants possess a distinct professional identity encompassing values, principles, and corresponding behaviors. Professional identity refers to the perception of oneself and the duties and obligations that individuals establish within their professional environments (Bolander et al., 2019). As professionals, consultants need to manage their professional identity as they navigate different contexts and organizations, thereby having to establish their credibility while also adopting to their clients' culture and expectations, which can pose challenges in reconciling their own professional values with those of clients (Kraatz & Block, 2008). Further, professional identity is connected to using AI in the consulting industry, since it was found that perceived identity threats are a significant predictor of resistance to the adoption of AI (Jussupow et al., 2022). Research shows that consulting firms shift from only giving advice to offering digital solutions (Tavoletti et al., 2021). Among these solutions, AI has the potential to both positively and negatively impact the consulting industry. On the one hand, AI can automate routine tasks, provide advanced analytics, and facilitate machine learning, thereby increasing the value of consulting services. On the other hand, implementing AI technology presents challenges for consulting firms due to significant investments in technology and talent required, as well as the potential disruption of existing business models

(McKinsey&Company, 2017). Hence, it is important to gain more information about AI being

implemented in the consulting business since it has the potential to significantly change the status quo regarding the work of consultants and to understand possible challenges and opportunities for them. Susskind and Susskind (2016) even claimed that they expect that AI can possibly replace a lot of professional work jobs, such as consultants. Since AI is being applied in the consulting business already, the question arises to which degree it will replace the consultant's traditional work, if it is supplementing their work, or if it is of any use at all. For example, the use of AI could change the way of conducting consulting work, impact the roles and responsibilities of consultants, and alter client-consultant relationships.

Considering the main findings about the use of AI in the consulting business so far, and how it affects consultant's professional identity, there are still important elements to be discovered. One of them is the declining demand for traditional consulting services and the shift to a higher demand for software-based services, which means that consultants need to be able to understand and apply software services (Gonfalonieri, 2020). One of these services is AI, which makes it important to research AI's influence on consultants' professional identity. This is a valuable research topic because of the potential for AI to significantly enhance consulting processes through tasks such as providing data-driven insights and extensive data analysis as well as automating routine tasks (Davenport & Ronanki, 2018; Frey et al., 2013). Based on the provided background information, this research aims to shed light on how AI impacts the consultant's professional identity. This leads to the following Research Question (RQ):

"In what ways does Artificial Intelligence impact the consultant's professional identity?"

The question addresses a current issue in the industry and provides valuable insights into the impact of AI on consulting companies and especially on consultant's professional identity. Further, it contributes to the development of new consulting models.

1.1 Theoretical contributions

To understand the RQ, this study is adopting the knowledge workers' theoretical perspective on consultants (Alvesson, 2004). That means taking into consideration the unique skills and expertise that consultants have. By adopting the knowledge workers' perspective on consultants, this study is seeking to explore how consultants approach their work, thereby especially focusing on their professional identity perspective. This is helpful when exploring how AI impacts their work as knowledge workers. It helps to understand how consultants navigate and negotiate their professional identities, especially in the face of challenges posed by AI adoption. Drawing on the results of a study on how AI can threaten personal identity, it seems to be that AI actually threatens professional identities, especially for novices and less for long-serving experts (Jussupow et al., 2022). The aforementioned authors further claim that it is important to address threats to professional capabilities through training to develop positive attitudes toward AI systems.

These findings connect to the research question of how AI impacts the professional identity of consultants, by highlighting the potential threats to professional identities and the importance of addressing them properly by training and identity work.

In recent years, there has been an increasing number of studies on AI and on the consulting business in the general (Frey et al., 2013; Kaplan & Haenlein, 2019). However, little research has been done to assess the impact on consultants' professional identity the implementation of AI as digital services for consulting firms may cause. This type of implementation involves integrating AI capabilities into software applications or services that can be assessed remotely or via the Internet, enabling the business to leverage the benefits of AI. Therefore, this study will add new insights on how the implementation of AI in the consulting industry will impact the nature of consultants' professional identity and thereby close the research gap. Also, researching that topic and filling the gap that is left in research is relevant since AI is a current and highly-demanded topic, which is also loaded with high potential to deliver empirical conclusions which benefit businesses and future research. Further and even more important, implications regarding the impact of AI on consultants' professional identity might be of added value to future research regarding the relative novelty of AI, which makes exploring that topic genuinely interesting.

1.2 Practical contributions

The current research also has three important contributions to practice. First, the business model of consulting firms has not been undergoing any major changes in the last decades. However, in the last ten years, there has been a shift in the value proposition. From solely offering professional advice, the age of digital transformation has led consulting companies to come up with innovative business models which encompass offering end-to-end digital solutions like pieces of software and algorithms that can optimize business processes (Tavoletti et al., 2021). Second, the topic of AI in the consulting industry is relevant to study because there is a shift to offering digital solutions instead of solely giving advice. Since the potential impact of implementing AI in the consulting business is not known yet, researching it might be an urgent task to take on for firms, their employees, customers, and freelancers in the consulting industry. This impact can best be seen from the perspective of consultants. Finally, the results might ideally give beneficial insights to the parties involved (consultants; consulting companies) and support the designing of consulting processes and business model developments. Further, the results of the research can potentially also be of value to other industries that are planning on using digital solutions in the future.

2. Theoretical Background

In the following, the theoretical backgrounds used as the framework of this study are going to be discussed. Among them are Artificial Intelligence, the influence of AI on consulting, Consultants as knowledge workers, the influence of AI on consultant's work, and professional identity.

2.1 Artificial Intelligence

Al pertains to the capacity of machines to perform tasks that typically necessitate human intelligence, such as recognizing speech, decision-making, and learning from experience. It entails utilizing algorithms and computer programs to scrutinize data, detect patterns, and make projections or provide suggestions based on the information analyzed (Russell, 2010) Further, Baker et al. (2019) define AI as not describing a single technology but rather functioning as an umbrella term to describe a broad range of technologies and methods, such as machine learning, natural language processing, data mining, neural networks, or an algorithm. Also, AI is a term not to be confused with other concepts like the Internet of Things (Ahmed et al.) and Big Data, but should be differentiated (Haenlein & Kaplan, 2019). AI is an indubitable present subject across various industries. Nevertheless, not everyone talking about it precisely knows what exactly AI is. Further, Kaplan and Haenlein (2019) describe AI as a rather fuzzy concept with many open questions surrounding it. Nonetheless, this paper relies on the following definition of AI: "A system's ability to interpret external data correctly, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation" (Haenlein & Kaplan, 2019, p. 5).

Furthermore, Haenlein and Kaplan (2019) shed a light on the different perspectives of AI. They are doing so by summarizing seven articles about AI penned by experts in the field. Their article highlights the past, the present, and the future of AI and its respective underlying developments, advantages, and disadvantages. By shedding light on the origins of AI, Haenlein and Kaplan (2019) found that as early as the 1950s an intelligent machine called "The Bomb" was created by English mathematician Alan Turing, which was able to decipher the German enigma code used in WWII and considered the first-ever intelligent machine. In the 1970s high investments in that area followed. Joseph Weizenbaum's program ELIZA, which was able to simulate a conversation with a human being, was among the more successful stories of AI. Among others, this achievement made Marvin Minsky mention in an interview in 1970 that he was convinced that in about three to eight years it would be possible to create a machine with human-like intelligence. The other side of the coin was a series of negative scientific reports regarding AI in the range from 1973 to 1980, which caused a decrease in investment and stagnation in AI development. It was also found that artificial neural networks and deep learning, the foundation of today's understanding of Al, go back to the 1940s and made a comeback in 2015 through google, which from then on used the concepts as a base for their speech/image recognition and self-driving cars.

Kaplan and Haenlein (2019) further describe the Present of AI as follows. The researchers claim that it is not about the question of whether AI will find its way into our personal lives and into the decision-making processes of companies, but in which role. Thus, the question is rather about which decisions will be made by AI, which by humans, and where a cooperative approach comes into play. Shrestha et al. (2019) went into further detail about this delegation of tasks when a firm needs to make a decision. They found, that decision-making depends on several factors, among which decision-making space, alternative set size, decision-making speed, and need for interpretability and replicability.

The future of AI is mainly concerned with regulation, danger, and potential biases, due to the fact that AI plays a certain role in our personal lives. For example, Wilson et al. (2019) found that when it comes to self-driving car cameras detecting people, AI is able to detect lighter skin tones better than darker ones, due to the pictures used for training the AI. Thus, racial bias, among numerous others, should be considered when using AI. Considering the aforementioned, Haenlein and Kaplan (2019) found that instead of regulating AI itself, developing commonly accepted requirements concerning the training and development of AI, in connection with some kind of warranties, might be the optimum solution.

2.2 The influence of AI on consulting

As AI continues to shape the business world, employment is crucial to consider. While AI may replace some jobs, it can also create new job opportunities in areas such as data analysis and programming, leading to a polarization of the labor market (Autor, 2015). Virtual reality, such as the Metaverse, can also become more important for unemployed workers (Kaplan & Haenlein, 2019). In decision-making, algorithmic approaches do not limit user involvement but provide the opportunity for humans to act as mediators between algorithmic and human decision-making (Bader & Kaiser, 2019). AI should augment, not replace, human decision-making, as humans bring a more holistic approach to decision-making to the table (Jarrahi, 2018). In the consulting industry, digital transformation has led consulting firms to offer AI-based solutions as part of their end-to-end digital solutions (Tavoletti et al., 2021).

2.3 Consultants as knowledge workers

Consultants are professionals who provide expert advice and guidance to organizations or individuals seeking to improve their performance, solve complex problems, or achieve specific targets (Alvesson, 2004). Typically, consultants are hired on a temporary basis to work on specific projects, and they either work independently or as employee of a consulting firm. Consultants are knowledge workers since they rely heavily on their specialized knowledge and expertise to provide value to their clients (Alvesson, 2004). Consultants rely on their knowledge to help clients identify and analyze problems, develop solutions, and implement strategies that drive business success. Furthermore, consultants are typically hired to help organizations navigate complex challenges that require a deep understanding of the respective industry and market dynamics (Drucker, 1999). This implies that consultants may be called upon to provide strategic advice, help develop new products or support organizational change processes. In all of these cases, their knowledge and expertise are critical to achieving success.

2.4 The influence of AI on consultants' work

Knowledge work can be defined as problem-solving capabilities and the ability to creatively interpret and adjust to new challenges; thereby, it is often characterized by a high degree of uncertainty (Alvesson, 2004). Expert thinking, complex communication, and analytical reasoning are key aspects of knowledge work (Brinkley & Work, 2009), which is why Consultants can be considered typical knowledge workers since they provide services that cannot be stored in databases or fed into AI systems. Further, consulting services are typically intangible and developed based on collaboration with clients (Løwendahl & ProQuest, 2005).

In a qualitative study by Pettersen (2015) of knowledge workers (consultants), two types of workers were defined. These were technical knowledge workers, which had to face well-defined IT and computing work problems, and process knowledge workers, which had to face people and organization and less well-defined problems, whereas both parties had to work together closely with other individuals. The first mentioned found correct or true existing solutions, whereas the process knowledge workers had to find solutions to problems that did eventually not exist before, meaning that they could not rely on answers given in the past. Because of the complexity of these problems, it was even too difficult to write them down and ask others for help. Thus, these problems did not have a single correct answer. That also meant that AI was not able to solve these problems because of their high complexity and the absence of generic solutions. Pettersen (2015, 2016) concludes, that AI-based systems are thus likely to struggle to solve these kinds of knowledge work problems. That in turn does not mean that AI cannot benefit knowledge work-based organizations, but rather that it can support complex knowledge work (Autor et al., 2003), which nevertheless ultimately means that key areas and dimensions of work problems will still need humans.

2.5 Professional identity

Consultants need to establish credibility and authority while adapting to the culture and expectations of their clients. As external experts, they face challenges in reconciling their own professional identities and values with those of their clients. Understanding and managing their professional identity is therefore crucial for them, and this can be impacted by the adoption of AI.

Professional identity refers to the sense of self and the roles and responsibilities that individuals develop in their professional contexts (Bolander et al., 2019). It was found that three emotional themes, namely feeling valued, vulnerable, and in control reflect the

challenges and tensions professional identities face in balancing their expertise with their managerial roles (Cascón-Pereira & Hallier, 2012). Further, research revealed that emotionally important social identities impact the construction of managerial leader identity among nurses (who are also considered knowledge workers), since they face challenges in balancing their caregiving and managerial roles, and understanding the influence of social identities such as gender and professional identity can help organizations better support them (Croft et al., 2015).

The link between professional identity and AI for consultants is relevant because the increasing integration of AI into businesses imposes a remarkable change for employees and their professional identity. AI may even negatively impact employees professional identity fundamentally, fostering the fear of being replaced (Mirbabaie et al., 2022). Furthermore, to visualize the link between professional identity and AI, it was found that perceived identity threats, such as fear of job displacement and loss of professional autonomy, are a significant predictor of resistance to the Adoption of AI – a problem that can be addressed by providing training and support which promotes the collaboration between humans and AI, thereby emphasizing the importance of human expertise (Jussupow et al., 2022). The connection between professional identity and consultants is that consultants are professionals and therefore have a professional identity, thus they must navigate and negotiate their own professional identities, values, principles and behaviors, particularly as they move between different organizations and contexts (Kraatz & Block, 2008). The two authors further mention that as external experts, consultants must establish their credibility and authority while also adapting to the culture and expectations of their clients, whereas also facing challenges in reconciling their own professional identities and values with those of their clients. Therefore, understanding and managing professional identity is crucial for consultants.

2.6 Framework/theoretical perspective

From the perspective of professional identity, the use of AI in consulting raises questions about the role and value of human expertise in problem-solving and decision-making processes. While some research claims that AI can provide valuable support and augment human cognition (Davenport & Ronanki, 2018), it is not expected to replace the critical thinking and creative problem solving skills that are essential to consulting work (Susskind & Susskind, 2015). As such, consultants may need to adapt their professional identity to incorporate new technological tools and collaborate with AI-systems in order to continue providing high-value services to clients. At the same time, it will be important for consultants to maintain their core identity as knowledge workers, drawing on their expertise and experience to deliver strategic advice and innovative solutions that leverage the strengths of both human and AI-based approaches. These findings seem to indicate that existing research is contradictory. At the same time, research has shown that professional identity is important because the changes in the nature of work and organizations seem to have affected the development of professional identity among consultants, which makes maintaining it even more important in order to have strong credibility, expertise, and reputation, perceived by consultants themselves as well as by clients (Burke & Ng, 2006). Also, considering the potentially improved productivity and efficiency of AI in consulting, human expertise and thus knowledge work remains essential for creativity, innovation, and problem solving (Brynjolfsson & McAfee, 2014). In summary, the link between professional identity and AI is relevant for consultants because it highlights the importance of maintaining a strong professional identity in the face of technological change. That is why it is important to study this topic in this thesis.

3. Methods

3.1 Research Design

A qualitative, inductive research was the best choice for this study exploring the influence of Al on consultant's professional identity for several reasons. Firstly, qualitative research methods are particularly useful for topics that have not been extensively researched and thus only have limited data availability (Hammarberg et al., 2016), such as the influence of Al on consultants' professional identity, as they allow researchers to gather in-depth and detailed information. With little to no data existing on this topic, new concepts and theories were subject to being developed with an inductive approach. Accordingly, using a qualitative research method where concepts and theories were developed inductively was the most applicable method (Gioia et al., 2013). Secondly, qualitative methods are often used in exploratory research, such as this one, which aimed to develop new ideas, theories, and hypotheses about a topic (Creswell & Poth, 2016). By having used techniques such as interviews for this study, a deep understanding of consultant's experiences with AI were gained. This information was then used to generate new insights and findings that could be tested in future studies. Thirdly, the use of qualitative research methods for a topic that has not been researched as extensively can contribute to a more nuanced and broad understanding of the topic (Creswell & Creswell, 2017). Fourthly, qualitative research has the ability to obtain more profound insights into the design, administration, and interpretation of assessments and testing, as well as exploring the behavior, perceptions, feelings, and comprehension of interviewees (Savin-Baden & Howell-Major, 2013). In conclusion, the use of qualitative, inductive research design allowed for a deep understanding of the influence of AI on consultant's professional identity and generated new insights and hypotheses that can be tested in future studies. This method contributed to a more nuanced and broad understanding of the topic and provided more profound insights into the behavior, perceptions, feelings, and comprehensions of interviewees.

3.2 Data Collection

The unit of analysis was the consultant, as this research focused on studying the impact of AI on the consultants' professional identity. The unit of observation were the tasks or activities that consultants perform, thereby considering their perception and experiences about working with Artificial Intelligence. The sample group for this research were consultants, regardless whether they worked for top consulting firms, SME's or as freelancers. They were asked to answer a set of questions concerning the implementation of AI in their working processes and/or how AI may have influenced their work life and professional identity. Interviewees were found by using professional networking sites, attending industry events, asking for referrals, and using online platforms. Further, a number of approvals were secured by the researcher by contacting consultants known from the private network. The number of interviewees was determined by the idea of theoretical saturation. Although saturation depends on factors like the complexity of the research question, the variability in the data, and the quality of data collected, a rule of thumb is that once new interviews no longer yield new insights, saturation should be achieved (Guest et al., 2006).

The interview participants were selected purposively, based on certain inclusion criteria which specified attributes that participants needed to possess to qualify for the study (Robinson, 2014). These criteria were that they work or have worked as consultants, and that they work or have worked with AI in their role as a consultant. This is, because consultants were the focus of this study since they are knowledge workers who rely on their expert thinking and analytical reasoning. Therefore, they were expected to have a better understanding of the impact of AI on their professional identity compared to individuals who are not in the consulting industry. Further, the study aimed to investigate the impact of AI on the professional identity of consultants, and only individuals who have worked with AI in a work environment were able to provide relevant insights. Overall, the inclusion criteria helped to ensure that the study's findings were specific to the impact of AI on consultant's professional identity and were based on the perspectives of those with relevant experience. Further, credibility of respondents needed to be assured. Only interviewees who were credible, trustworthy, and had a proven track record in the consulting industry were selected. One way to judge the credibility and trustworthiness of an interviewee was to look for consistency and coherence in their responses, as well as for evidence of their knowledge and expertise on the topic being discussed (Brooks et al., 2018).

The data for this study consists of 15 semi-structured interviews conducted with consultants who had experience working with AI. Table 1 displays the most important information about the respondents. The interviews were conducted via Microsoft teams and lasted 20 to 40 minutes each. Each participant reviewed and signed a consent form which assured the confidentiality and anonymity of their responses. The interviews were audio-recorded and transcribed for analysis reasons with the participants consent. A set of interview questions

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covered topics about the consulting profession, AI, and professional identity. The sample of 15 interviews was achieved because theoretical saturation was reached at this point, which means that once no new information was collected, the data collection process came to an end. Thus, the 15 interviews provided a diverse and comprehensive dataset, capturing a wide range of perspectives from consultants working with AI across different consulting areas. The different features across all respondents ensured a breadth of insights and depth of knowledge in the data. The data collected through these interviews served as the only source for the thematic analysis allowing for an in-depth exploration of the participants perspectives and generating rich and meaningful themes related to the research question.

Respondent	Age	Gender	Current Position	Highest	# of years	# of
				Degree	as a	interview
					consultant	minutes
#01	55	Male	Chief Product	PhD	28	32
			Officer			
#02	26	Male	Junior consultant	Bachelor	1	20
			Data & Analytics	of Science		
#03	24	Female	Intern	Bachelor	1	20
#04	38	Female	Management	PhD	10	27
			Consultant			
#05	26	Male	Consultant	Master of	1	27
				Science		
#06	25	Male	Director &	Bachelor	9	21
			Consultant	of Science		
#07	23	Male	Technical	Bachelor	2	20
			consultant	of Science		
#08	33	Male	Senior Consultant	Master	5	26
			IT Strategy &			
			Sourcing			
#09	29	Male	Research Associate	Master of	3	27
				Science		
#10	27	Male	Junior Consultant	Bachelor	1	20
#11	25	Male	Associate	Master	1	24
#12	64	Male	Freelancer	Master	23	37
#13	29	Male	Data Senior	Bachelor	6	25
			Consultant			
#14	37	Male	Practice Lead	Master	15	40
#15	40	Male	Professor	PhD	7	24

Table 1

The research was conducted by using semi-structured interviews in an online environment through Microsoft Teams, because this allowed for a larger and more diverse pool of participants, which enhanced the quality of data in terms of representativeness and variation (Mann & Stewart, 2000). Also, online interviews could be recorded and transcribed more easily compared to in-person interviews, which led to improved reliability and validity of the data (Mann & Stewart, 2000). Furthermore, online interviews may helped participants to feel more comfortable due to perceived anonymity, which could also have led to the data being richer and more detailed (Clarke & Braun, 2013). Another reason for choosing online interviews was receptiveness, since a wider pool of candidates could be reached regardless of their location, which eliminated the need for scheduling physical spaces or the time needed for travel, setup, and breakdown (Pentland, 2012). An argument in favor of conducting online interviews that should not be neglected is that online interviews reduced potential bias by making it more difficult to discriminate based on physical appearance or other factors that may have been present in an in-person interview (Reuben et al., 2014).

Potential risks for this data collection method, especially since the interviews were conducted in an online environment, were technical issues such as internet connection, privacy concerns, lack of nonverbal cues, and inaccurate data (Baker & Edwards, 2017). The risks were mitigated by preparing the equipment, informing the interviewees about privacy concerns and data protection, creating a safe environment, and minimizing the influence of surroundings that might have led the interviewee to share inaccurate data. Another drawback of using online interviews instead of in-person interviews was the lack of personal connection that may have been established during an in-person interview, which could have made it difficult for the interviewer to perceive non-verbal cues and interpersonal communication (Buchanan & Smith, 1999). Given the need for qualitative data as well as the time and scope limitations of this research, those arguments in favor of conducting online interviews against it (Morse, 1991). Overall, adopting online interviews for this research was a practical and effective choice that led to a more diverse and representative pool of participants, to more reliable and valid data, and to improved convenience and flexibility.

Ethical considerations for this research were addressed by information sheets and informed consent forms, which were sent to the interviewees in advance for ensuring confidentiality and protection of participants. The interviewees were further informed that their data will not be stored after the research project is finished, and nor would any personal data be spread or given to third parties. Upon participants' permission, the data was gathered through recording and transcribing the interviews. It is important to consider that the participant's privacy was being respected and that the data was collected ethically correctly, which was done by informing the participants about the reason and purpose of conducting the interviews (Health, 2008). Further, participants' data were anonymized whereby any

personal information were concealed (Smith, 2015). The interview protocol can be found under Appendix A in the Appendix section of this paper, as well as the information sheet (Appendix B) and the consent form (Appendix C).

Semi-structured interviews allowed for a flexible yet focused approach to data collection. They provided a balance between structure and flexibility, by allowing to cover specific research questions while also allowing participants to elaborate on their responses in a more open-ended manner (Bernard, 2017). This approach enabled the researcher to explore the experiences, perspectives, and insights of consultants related to the impact of AI on their professional identities. For this reason, a set of open-ended questions was used that focused on the research topic and objectives, which can be found under Appendix D. The questions served as a guide for the interview, but the interviewer had the flexibility to ask follow-up questions or probe for further information based on the participant's responses (Rubin & Rubin, 2011). This approach allowed for a deeper exploration of the consultant's experiences and perspectives (Braun & Clarke, 2019).

Based on the RQ: "In what ways does Artificial Intelligence impact the consultant's professional identity?", the interview questions touched upon key themes related to consultants and the impact of AI on their professional identity. The questions asked the consultants to describe their roles, essential skills, and how they envision their work. The consultants shared their knowledge of AI, the technology that they use, and they were further asked if they received any training about AI. Also, concerns and advantages of AI were being discussed. The interview also dived deeper into how AI is shaping the future of consulting and explored the respondent's perspective on its significance in the next years. As AI becomes more prominent, consultants reflected on changes in their understanding of the profession and how it affects their professional identity. They were also being asked how AI is changing the way that clients perceive consultants and the value they offer. Moreover, respondents were being asked to discuss how consultants can leverage AI and if the integration of it could lead to a potential shift in their professional identity.

3.3 Data Analysis

The data was analyzed using Thematic Analysis (Braun & Clarke, 2006) through the Gioia et al. (2013) approach. Thematic analysis is a qualitative research method used to analyze data from for example interviews. It involves systematically identifying patterns and themes within the data by coding and categorizing the information. The themes emerging from this process can then be interpreted and used to gain insight into the phenomenon being studied (Braun & Clarke, 2006). Gioia and colleagues elaborated a structure used to analyze textual data. This method involves breaking down a text into its constituent parts such as words, phrases, sentences, and paragraphs, and analyzing how these parts are structured and related to each other. It emphasizes the importance of developing clear research questions, using qualitative sources of data, and continually refining the analysis to develop a coherent story to achieve a qualitative rigor in inductive research (Gioia et al., 2013). By understanding the structure and organization of a text, researchers can gain insight into the meanings and interpretations that are embedded within it (Flick, 2013). This research used thematic analysis to identify and interpret themes within the interview data and then used the Gioia's structure to analyze how those themes are represented and communicated within the documents (Gioia et al., 2013).

The collected and transcribed interview data was analyzed through coding and afterward developing a data structure and model. That means each interview was coded based on mutually exclusive and collectively exhaustive inductive codes. Following this, overarching patterns within and across interviews were distilled. Finally, common concepts and themes were discovered, and a data structure, as well as a model, was created. To facilitate this analysis, the software tool 'Atlas.ti' was utilized. Atlas.ti is a qualitative data analysis software that provides a range of features to support the organization, coding, and analysis of qualitative data. It allowed for efficient management of the large data set, aided in the coding process, and facilitated the identification and exploration of themes. Using Atlas.ti, the transcripts were imported into the software and coded line by line. Initial codes were generated to capture important information related to the research question. These codes were then organized into broader categories, which served as the first order concepts. Through iterative cycles of coding, reviewing, and refining, second order themes emerged by grouping related first-order themes. By then merging second order themes, aggregate dimensions emerged and were afterwards transferred into a framework. The Gioia method's emphasis on inductive coding allowed for the identification of patterns and themes directly from the data, without imposing preconceived notions or theoretical frameworks. By using the Gioia method and utilizing Atlas.ti as a supporting tool, the analysis achieved a systematic and rigorous exploration of the interview data, enabling the identification of meaningful themes and insights that addressed the research question. In total, 177 first order concepts, 20 second order themes, and four aggregate dimensions emerged from the analysis. An example of a first order concept is "personal role as a communicator". Further, one example of the 20 second order concepts is "AI proficiency and perceptions: Expertise, training, familiarity, and recognizing Al's potential". One example of the four aggregate dimensions is: "challenges and concerns of AI integration".

4. Results

The results section presents the findings of the thematic analysis that was conducted via the Gioia methodology on the collected interview data, thereby exclusively focusing on the second order themes and the aggregate dimensions. An overview of how the second order themes and aggregate dimensions are linked to each other (data structure) can be found in Figure 1.



4.1 Unraveling the impact of AI on consultant's professional identity: General findings and insights

In this section, the results will be described, starting with general findings (4.1), and followed by the most important findings, namely four dimensions. Firstly, light is shed on how respondents defined AI. Secondly, the respondent's perceptions and definitions of professional identity are being highlighted. Thirdly, AI tools used by respondents are mentioned. Fourthly, respondent's perception of what it means to work with AI are examined. After the description of these general findings, the light will be shed on how the most important findings were ultimately transformed into a model consisting of four aggregate dimensions in section 4.2. These will be described and displayed at the end of the results chapter (Figure 2). The connections and relationships between the emerged dimensions are explained in chapter 4.3 and are also displayed in Figure 2.

4.1.1 Respondents' definitions of AI

In order to understand how the respondents experienced the impact of AI on their work and their professional identity as a consultant, it is crucial to mention how they define AI. Although most of the respondents had different definitions of the term, some of the more frequent definitions were that AI is a software that continuously learns from human intelligence and that takes over redundant tasks, or to put in the words of respondent #02,

"Al is like [...] human intelligence [...] that is always learning [...] that makes a lot of tasks easier". Another definition used more often was that Al is "like computer smartness to think and make conclusions for you" (respondent #03).

4.1.2 Respondents' perceptions and definitions of professional identity Another important point to mention is the respondents' perception and definition of professional identity. There was a wide range of different views among respondents, ranging from perceiving it as negative and hoping for a change to perceiving it as something that describes their own strong attributes. For instance, respondent #01 mentioned that in his perception,

> "The identity of my consultancy job, is most of all [...] associated with a rather negative image and identity for the consultants himself or herself, and I think that's a big chance that AI will have a positive and very much positive impact on the consultancy job and on the consultants as a person".

Furthermore, many respondents connoted their professional identity to their own core strengths and personal roles, as well as to how they approach their work, which differed from respondent to respondent. That means that the attributes and features that are defining them are also their respective understanding of what professional identity means. To illustrate that, a statement from respondent #03 can be used, who claims that: "I think in a consulting role, I again see myself very much as the problem solver and the analytical mind behind a problem, and I think the role as a consultant changed a lot with the seniority in it"

4.1.3 AI tools used by Respondents

Further, the results highlight that various AI-tools are used in the work of consultants. With a majority of respondents mentioning that they use ChatGPT in their work, mostly to take over repetitive and/or easy but time-intensive tasks, it becomes visible that AI tools are being used more frequently. Further, a set of various AI tools was mentioned.

> Among them was 'Ask Brian', which is used for "competitor analysis" (respondent #10), 'spark beyond' for "feature engineering" (respondent #15), 'GitHub Copilot' for "programming related" work (respondent #06), or 'Apple's Siri' for getting "answers to simple questions" (respondent #04).

4.1.4 Respondents' perception on what it means to work with AI

Additionally, it is important to focus on what the respondents think it means to work with AI. Here, the perceptions were quite diverse. For instance, it was mentioned that AI can be seen as a skill consultants should add to their skillset, or to describe it in the words of respondent #03:

working with AI is just another skill which consultants should add to *their "toolbox"*, but that currently, *"AI is not mature enough to really take over the tasks done by consultants"*.

Considering AI as just another skill or tool for the consulting toolbox was also what a few other respondents mentioned. On the other hand, working with AI meant to some respondents that new competition is arising, but also that AI can improve the work of consultants. Respondent #13 thought that with the new situation of working with AI in consulting, there is:

"Quite a competition that is [...] arising". Also, a majority of interviewees thought that working with AI is indeed advantageous, since "AI in its various forms can be a great tool to increase your efficiency" (respondent #09), or because "you can achieve really good results and you can somewhat overcome this tendency to judge certain things based on a gut feeling. [...] With AI [...] you can put everything on a basis of facts" (respondent #15).

4.2 Modelling the impact of AI on consultant's professional identity: Unveiling four aggregate dimensions

Having described these general findings, the light will now be shed on how the findings were ultimately transformed into a model consisting of four aggregate dimensions. These will be described in the following and displayed at the end of the results chapter (Figure 2). The

findings of this research show that AI has an impact on professional identity in four dimensions, which are "Transformation of consultant roles and skills in the AI era", "AI skills and qualities of effective consultants", "Challenges and concerns of AI integration", and "Value and perception of human consultants in the age of AI".

4.2.1 Transformation of consultant roles and skills in the AI era

The first dimension represents the transformation of typical consultant roles and skills in response to the integration of AI into the consulting business. It is about the adaptation, redefinition, and continuous learning required of consultants to successfully incorporate AI into their work. There are several ways in which these roles and skills are transformed. Firstly, the application of AI, means a fundamental change to the professional identity of consultants, who in turn have to redefine their roles, their knowledge and skills, as well as how they creatively engage in their work to stay competitive and relevant in a more and more AI-driven landscape, according to the respondents. Secondly, this transformation can be described by shedding a light on how respondents thought that consultants should continuously try to embrace AI and adapt to AI. Both aspects can be validated by this quote of respondent #04, who mentioned that:

"You still always need to stay open for new technologies [...] open to adapt and not being afraid of these technologies [...] it's lifelong learning [...] I think you always need to redefine kind of your identity to being open to whatever new is coming."

This statement discusses the importance of consultants consistently adopting new technologies and maintaining receptiveness to changes in both their identity and technological landscape. It also tells how continuous learning and redefinition of roles are key, which is why these aspects are addressing the first dimension of consultants transforming their professional identity and skills to incorporate AI into their work to stay relevant in an AI driven landscape.

4.2.2 AI skills and qualities of effective consultants

The second dimension focuses on what respondents thought are skills and qualities that effective consultants must possess in the context of AI integration. As consultants embrace AI and adapt their roles accordingly, they may need to develop new competencies, including AI expertise. Communication, analytical thinking, adaptability, and professionalism were identified as key attributes for effective consultants in the era of AI. The success of consultants in the consulting industry with the emergence of AI in it depends on their ability to acquire and utilize these essential skills, according to the interviewees. There are various means to describe this dimension. Firstly, it can be described by the personal roles the respondents have, for example by being:

a "communicator" (respondent #05), an "analytical person" (respondent #15), "persistent" (respondent #10), or a "data-oriented consultant" (respondent #01).

Secondly, this dimension can be explained by what the respondents consider the qualities a consultant should have, for instance:

"Problem solution thinking" (respondent #12), "communication" (respondent #02), or "analytical thinking" (respondent #01).

These statements correspond to the second dimension since they highlight a range of diverse skills and qualities an effective consultant should have, as mentioned by respondents.

4.2.3 Challenges and concerns of AI integration

The third dimension revolves around the challenges and concerns that arise from integrating AI into consulting practices. It includes issues such as misleading AI output, skill shortages concerning AI, acceptance barriers among consultants, and reliability concerns. This dimension can be characterized through multiple approaches. Firstly, challenges and limitations of AI in practice, for example misleading outputs, expertise scarcity, staying updated, acceptance hurdles, and reliability concerns were mentioned by the respondents as problems surrounding the use of AI in consulting. Especially, a majority of respondents voiced reliability concerns about AI:

"The downside [...] is that you have to double check" (respondent #15), "there is no way to verify the information that is being given to you [...] by ChatGPT" (respondent #07).

Secondly, respondents mentioned concerns and fears surrounding AI, which are misinformation, ethics, responsibility, and job security, which can be illustrated to characterize this dimension. Particularly, respondents were concerned about AI providing misleading information:

"You cannot really be sure that the model does what it should do and that it doesn't contain any biases" (respondent #15).

Dealing with the challenges and concerns of AI, these findings draw on the topic of the third dimension. Addressing these challenges is important for consultants to successfully incorporate AI into their work, use it to their advantage, and avoid potential risks, according to interviewees.

4.2.4 Value and perception of human consultants in the age of AI

The fourth dimension relates to the value and perception of human consultants in an Aldriven landscape. It includes how AI capabilities, perceptions, and the use of AI-powered tools affect the recognition and perception of human consultants. Numerous avenues can be utilized to exemplify this dimension. Firstly, respondents mentioned that human consultants have an enduring value in the AI-driven landscape because clients would recognise their context-specific expertise and the limitations of AI, which highlights the lasting importance of human consultants despite the presence of AI. Feeding into that, respondent #15 mentioned that:

"What consultancies can do is way beyond what AI can do", and respondent #14 claims that "the role of the consultant is really human based. So there's a lot of personal relationship. There's a lot of communication. There's a lot of understanding. There's a lot of creation and creativity. Companies hire consultants [...] as the people with expertise, regardless of which tools they use".

Secondly, interviewees mentioned that the consultant professional identity is resilient in the face of AI, since there is a recognition for the ongoing need for human expertise, adaptability, and the importance of staying up-to-date with technology. Respondent #02 mentioned that:

"As a consultant, there is now [...] AI competition. You need to be [...] more like up to date".

The aforementioned findings are representative for the fourth dimension since they describe how the value and perception of human consultants endures despite Al's application in the consulting business, since Al cannot reach the benchmark human consultants are setting with their expertise, according to interviewees.

4.3 Exploring interconnections and implications of Transformed Roles, Skills, and Challenges

In the following, the connections and relationships between the dimensions are explained. These connections and relationships between the emerged dimensions are also displayed in Figure 2.

4.3.1 Redefining roles requires different skills

The results highlight that the transformation of roles and skills of effective consultants in the AI era influence the AI skills and qualities required of effective consultants. As consultants embrace AI and redefine or shift their roles, they may need to develop new skills, especially AI expertise. The evolution of roles and skills drives the demand for specific skills and attributes, for example, the integration of AI may require consultants to improve their analytical thinking abilities to interpret and effectively utilize AI generated insights.

This is underlined by a statement of respondent #08, who mentioned that:

"I have to shift [my professional identity] to adapt to AI in general [...] use it to my advantage. I definitely should not ignore it because our work gets affected by it. We as consultants should take advantage of the possibility to use AI in our work so that we get things done more quickly". Respondent #02 mentioned, that he had to redefine his professional identity by adding "more technological knowledge" to his skill set.

4.3.2 Transforming consultant roles and skills in the AI era impacts value and perception of human consultants

Further, the results show that the transformation of roles and skills of effective consultants influences the value and perception of human consultants in the age of AI. As consultants redefine their roles and incorporate AI, the perception of their expertise and their actual worth may be subject to change. While AI offers many positive features, it is important to maintain the enduring value of human consultants and shed a light on the unique expertise they can bring to the table. The connection between the transformation of consultant's roles and skills in the AI era and the value and perception of human consultants in the age of AI underscores the interplay between AI-driven efficiencies and the personal touch that human consultants provide and which clients highly value, ensuring the consultants' sustained relevance and competitive advantage in the AI era. Respondent #04 provided a statement supporting this:

"If we have a machine behind which already gives me the perfect analysis, I still have to ask the right questions and put the right questions into the machine. And this is basically what we as consultants classically have done in the past and will be doing in the future, being the one translating the problems into questions into problem solutions". Respondent #08 further mentions, that: "many clients will try it [using AI] and also many of them will fail and that's the point where we as consultants or the consulting industry in general have to move forward faster than our clients".

4.3.3 The influence of AI related challenges on the transformation of consultant's roles and skills in the AI era

Finally, the findings in Figure 2 display that challenges and concerns of AI integration impact the transformation of consultant's roles and skills in the AI era. Addressing the challenges and concerns of AI integration is vital for consultants to adapt and thrive in the rapidly changing landscape shaped by AI. For instance, concerns about misleading AI outputs may lead consultants to validate AI results externally and not solely rely on AI-generated output. Skills shortages concerning AI may drive consultants to pursue training and other initiatives to equip themselves with the required competencies. The impact of challenges and concerns of AI integration on the transformation of consultant's roles and skills in the AI era highlights the need for proactive strategies to overcome challenges and make use of AI's potential while ensuring a seamless integration into consulting practices. As already mentioned, trainings could be helpful for that. On the question, whether respondent #05 already received any training or education regarding AI, the answer was:

"Zero [training] and I have already addressed this point at my company". Respondent #03 mentioned that regarding AI, she received training to "none extent".

These dimensions and the connections between them connect to the research question by providing a comprehensive framework to understand the ways in which AI impacts the consultant's professional identity. Overall, the in-depth analysis reveals the complex relationships between the four dimensions and their profound impact on consultants' professional identity in the context of AI integration. The connections emphasize that successful AI integration requires a holistic approach that considers the transformation of consultant roles and skills in the AI era, the development of AI skills and qualities of effective consultants, the navigation of challenges and concerns of AI integration, and the preservation of values and perceptions of human consultants in the age of AI. Understanding these connections enables consultants to come up with effective strategies that leverage AI's capabilities while at the same time upholding the unique strengths that, at least until nowadays, only consultants can offer. It also ensures continued success and relevance to consultants in a rapidly changing landscape of AI-driven consulting.



Figure 2

5. Discussion

This research has revealed important insights regarding the impact of AI on consultant's professional identity. The findings highlight the need for adaptation, continuous learning, and redefinition of consultant's roles in response to the integration of AI. These insights contribute to existing knowledge in the field and provide valuable implications for practice, theory, and future research. To further explore the findings, they are contextualized with existing literature. The study's dimensions align with established theories and concepts, and thus offer a more nuanced understanding of how AI impacts consultant's professional identity.

Main takeaways

The multidimensional model of AI's impact on consultant's professional identity that emerged through this study offers an understanding of the multifaceted interplay between AI and consultant's professional identity, integrating transformation of roles, AI skills, challenges, and value perception. The framework, incorporating both consultant perceptions and practical applications of AI tools, contributes a new perspective to the literature on Al's impact on professional identity in the consulting domain. Further, the findings shed light on how individual consultants define their professional identity and how this influences their perceptions of Al's impact. This personalized and nuanced approach to professional identity and its interplay with AI is a novel aspect not extensively explored in previous research. Although Susskind and Susskind (2016) claimed that they expect AI to possibly replace a lot of professional work jobs, such as consultants, this study found that the impact of AI on consultants and their professional identity is more profound than just potential replacement of consultants through AI. The study found that there is a complex interplay between AI and consultant's professional identity, integrating the transformation of consultants' roles, the need for AI skills, the need to tackle challenges, and the preservation of value perception of human consultants.

The study's findings showed that respondents use different definitions of AI, ranging from AI being a software that continuously learns from human intelligence and that takes over redundant tasks to AI being a form of computer smartness that can think and make conclusions. These definitions align with the existing literature that describes AI as an umbrella term encompassing various technologies like machine learning, natural language processing, and algorithms (Baker et al., 2019). The findings indicate that there is not the one perfect definition of AI that is commonly used among consultants, which may influence how exactly they perceive and integrate AI into their work.

Further, the study revealed that consultants' perception and definition of professional identity vary, with some of the respondents associating it with a negative image and others emphasizing their core strengths and personal roles. This individualistic approach to professional identity resonates with existing literature on professional identity, where

individuals develop a sense of self and role within their professional contexts (Bolander et al., 2019). The findings suggest that how consultants define their professional identity influences how they perceive the impact of AI on their work. Those who perceive a negative professional identity may see AI as something positive that has potential to enhance their role as a consultant, while others may feel threatened by the possibility that AI replaces their expertise.

The study's findings showed that the integration of AI into consulting requires the transformation of consultant roles and skills, since consultants must adapt to AI, redefine their professional identity, and continuously learn to incorporate AI into their work successfully. This aligns with the concept of knowledge work, according to which consultants rely on specialized expertise to provide value to their clients (Alvesson, 2004). The findings emphasize that AI requires consultants to continuously redefine their roles and creatively engage in their work, underscoring the need for adaptability and continuous learning (Alvesson, 2004). Notably, this finding highlights the dynamic nature of consulting work and the necessity of incorporating AI into consultants' professional identity to stay competitive and relevant in an AI-driven landscape.

Furthermore, the study identified the necessary AI-related skills and qualities for effective consultants in the AI era. These include communication, analytical thinking, adaptability, and professionalism. The findings correspond to the evolving role of knowledge workers, where consultants must possess these skills to succeed in the AI era (Brinkley & Work, 2009). This study highlights that consultants recognize the need to continuously embrace AI as a skill and tool, aligning with the notion of human AI-collaboration in decision making, where AI augments rather than replaces human expertise (Davenport & Ronanki, 2018). This aspect acknowledges the importance of human consultants in navigating the complexities of AI while leveraging AI's advantageous capabilities.

Further, the findings of this thesis shed light on the challenges and concerns related to AI integration in consulting practices. Consultants expressed concerns about misleading AI outputs, skill shortages, acceptance barriers, and reliability concerns. These concerns reflect existing research on the challenges and limitations of AI in practice (Wilson et al., 2019). The findings highlight the importance of proactively addressing these concerns, underscoring the need for consultants to address and overcome the aforementioned complexities and effectively use AI while minimizing risks (Jussupow et al., 2022). Particularly, this aspect reveals the potential obstacles that consultants may find when incorporating AI into their work.

As the findings revealed, human consultants have enduring value in the age of AI. Clients recognize the unique expertise and context-specific insights provided by human consultants. This finding aligns with existing research that highlights the ongoing need for human expertise, adaptability, and the importance of maintaining a personal connection in consulting relationships (Brynjolfsson & McAfee, 2014). The recognition of the value of human consultants accentuates the resilience of the consultant's professional identity in the face of AI integration and the enduring importance of human consultants.

The study's multidimensional model (*Figure 2*) of how AI impacts consultant's professional identity aligns with the concept that consultants navigate and negotiate their professional identities across different organizational and client contexts (Kraatz & Block, 2008). The study emphasizes the importance of managing and adapting professional identity in the face of technological change, where consultants must incorporate AI while maintaining their core identity as knowledge workers (Mirbabaie et al., 2022). The integration of AI into their professional identity enables consultants to leverage AI's capabilities while maintaining their unique strengths, ensuring success and relevance in an AI-driven consulting landscape. This aspect highlights the significance of finding a balance between AI integration and the preservation of human consultant's expertise.

To conclude, this study provides valuable insights into the impact of AI on consultant's professional identity and offers a comprehensive framework to understand the complex dynamics between AI integration, professional identity, and the enduring value of human expertise in the consulting domain. The findings emphasize the need for continuous learning, adaptability, and proactive strategies to embrace AI while preserving the unique strengths that human consultants bring to the table. This research contributes novel aspects to the existing literature on AI and professional identity in the consulting context.

5.1 Theoretical implications

The findings of this study contribute to the existing knowledge about how AI influences consultant's professional identity by providing a comprehensive framework addressing several aspects. Also, the data and findings are rather unique since they explore the way AI impacts consultants' professional identity in a time where AI is all over the world and may have had a huge impact on the respondents' work as consultants recently. The study adds new insights on how the implementation of AI in the consulting industry impacts the nature of consultants' professional identity and thereby closes the research gap. The findings shed a light on the adaptive professional identity of consultants, the diverse personal roles and qualities required of effective consultants such as analytical thinking and AI skills, the challenges and limitations of AI in practice, and the enduring value and perception of human consultants in an AI dominated business world. The findings of this study have several theoretical implications, drawing upon existing literature on AI's impact on consultant's professional identity.

First, the study reveals that the integration of AI into consulting practices requires a transformation of consultant roles and capabilities. Consultants must adapt, redefine their roles, and engage in continuous learning to effectively incorporate AI into their work. This aligns with Tavoletti et al. (2021), who emphasize the importance of consultants evolving their roles and expertise in response to AI's disruptive influence on knowledge-intensive professions. The most interesting finding here is the profound nature of the transformation,

as consultants need to reevaluate their professional identity to navigate the complexities of an AI-driven landscape effectively.

Second, the study identifies key skills and qualities that are essential for consultants to succeed in an AI-driven landscape. These skills include communication, analytical thinking, adaptability, and professionalism. Bader and Kaiser (2019) have also highlighted the significance of these skills in the context of AI integration. However, the striking finding here is how these skills need to be specifically tailored to AI's application in the consulting domain. Consultants must now use their communication and analytical thinking abilities to interpret and effectively utilize AI-generated insights, indicating a unique shift in their skill set.

Third, the study highlights various challenges and concerns related to AI integration (Pettersen, 2015, 2016) in consulting, such as misleading AI outputs, skills shortages, acceptance barriers and reliability concerns. However, the novel insight this study found is the urgency to address and overcome these challenges to ensure a seamless integration of AI in consulting practices. The findings underscore the need for training initiatives and the external validation of AI outputs, highlighting potential risks and emphasizing the importance of mitigating them.

Fourth, the study emphasizes the enduring value of human consultants in the age of AI. Clients recognize the unique expertise and context-specific insights provided by human consultants that AI cannot match, ensuring their continued relevance and competitive advantage. This finding aligns with Mirbabaie et al. (2022) in recognizing the value of human expertise in an AI-driven landscape, but the striking finding here is how human consultant's value endures despite AI's presence. The findings reveal that clients acknowledge the limitations of AI and recognize the irreplaceable personal connection, adaptability, and creativity that human consultants offer, which AI cannot replicate.

Overall, the theoretical implications of this research provide a comprehensive model for understanding the complex dynamics of AI integration impacting consultant's professional identity. The most interesting and striking findings include the profound transformation of consultant roles, the tailored AI-related skills and qualities, the urgent need to address challenges of AI integration, and the enduring recognition of human consultant's value in the face of AI's implementation in consulting. These insights enrich our understanding of AI's impact on consultant's professional identity.

5.2 Practical implications

The findings of this study can inform practitioners and organizations in navigating a seamless integration of AI in consulting and help them better understand the implications for consultant's professional identity. This study underscores the need for upskilling and

reskilling for consultants. They should acquire new competencies such as AI expertise to remain relevant and competitive in the AI-integrated consulting industry (Tavoletti et al., 2021). Also, the study shows the need for addressing challenges and concerns. In order to mitigate the risks of AI (Pettersen, 2015, 2016), consultants need to proactively address challenges related to AI integration, such as validating AI outputs externally and investing in AI-specific training to overcome skill shortages. Finally, the study underlines the need for balancing human expertise with AI solutions. Consultancies and consultants should adopt a collaborative approach, leveraging AI as a tool to complement or augment human decision-making processes rather than replacing it, thus enhancing productivity and efficiency while retaining their crucial roles as creative problem solvers (Mirbabaie et al., 2022). These implications offer guidance for practitioners and organizations to effectively navigate AI's integration while preserving the strengths of human consultants.

5.3 Recommendations for Future research

Furthermore, the implications of this study extend beyond practice and can guide future research endeavors. The 20 identified themes and four aggregate dimensions can serve as a basis for further research into specific aspects of AI's impact on consultant's professional identity. For example, future research could dig deeper into the challenges and concerns related to AI integration or the consultants' opinion on their professional identity changing through AI. Also, the model presented in this study can be tested and validated in different contexts regarding geographics, knowledge areas, or industries, to assess its generalizability and applicability. Furthermore, a similar research approach could address the same topic with a longitudinal study to explore the development of consultant's professional identity in an AI context over time.

5.4 Limitations

As all studies, this research has a number of limitations. Firstly, the sample of respondents were selected purposively, which may introduce selection bias. Participants who took part in the study might have different experiences or unique characteristics compared to those who did not participate, leading to results that may not accurately represent the entire group of all consultants. Secondly, the research focused on the consulting industry, thus the findings might not be applicable to other industries. Even though this focus was chosen to explore specifically an under-researched profession, future work could explore other professions, for instance engineers, layers, or doctors, to investigate the impact of AI and corroborate or extend the current findings. Thirdly, this study only relies on interview data for analysis. Using different data collection methods could have led to a broader range of results. Also, the research was limited to a single point in time and did not consider longitudinal analysis, which could have revealed how consultants' professional identity, under the impact of AI, evolves over time. Furthermore, the data collection included respondents from multiple countries in central and eastern Europe. Nevertheless, cultural differences might not have been fully explored in the analysis, since potentially, cultural

factors could influence the impact of AI on professional identity. Finally, the study's scope and depth of analysis could have been influenced by the availability of resources, such as time and budget, which might have limited the extent of data collection and analysis. Despite the mentioned limitations, the study provides valuable insights into the impact of AI on consultant's professional identity. To strengthen reliability and validity of future research, addressing these limitations could be prioritized, allowing for a more comprehensive, nuanced, and robust exploration of the topic.

6. Conclusion

This research has shed light on the impact of AI on consultant's professional identity. Based on the findings, a model was developed that integrates four components of professional identity of consultants: "Transformation of consultant roles and skills in the AI era", "AI skills and qualities of effective consultants", "Challenges and concerns of AI integration", and "Value and perception of human consultants in the age of AI". This model indicates that the integration of AI into consulting requires consultants to adapt and continuously redefine their roles, and leveraging AI as a tool to augment their expertise. Further, effective consultants must possess key AI-related skills such as communication, analytical thinking, and professionalism to succeed in an AI-driven landscape. However, challenges and concerns of AI integration, such as misleading outputs and skill shortages, require proactive strategies and risk mitigation. Thus, consultants should embrace AI as a skill and tool while preserving their enduring value in the face of AI's presence. Overall, this research highlights the dynamic nature of consulting work in the AI era and underlines the importance of effectively integrating AI while preserving the unique strengths and enduring value of human consultants in an AI-driven landscape.

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Appendices

Appendix A – Interview Protocol

"Hello and thank you for agreeing to participate in this interview about Artificial Intelligence and its impact on consultant work. My name is Henry David Kurzhals, I am 23 years old and from Germany. I am currently finalizing my master's study in business administration at the University of Twente in the Netherlands. This interview will contribute important insights to my master's thesis. Before we begin, I would like to take a few moments to go over some important information with you.

Firstly, please note that this interview will be recorded solely for the purpose of research. Your responses will be kept confidential and any personal information you share will be anonymized to protect your privacy. Additionally, your participation in this interview is completely voluntary, and you may withdraw at any time. If you have any questions about your rights as a participant in this research, please don't hesitate to ask.

Secondly, before we begin the interview, I would like get to know each other a bit better. This is also an opportunity for you to ask me any questions you may have about the study or the interview process.

Finally, I would like to ask you to review and sign the consent form that was sent to you prior to this interview. The form outlines the purpose of the study, the risks and benefits of participation, and your rights as a participant. It also includes a section for you to indicate your consent to participate in the study.

If you have any questions or concerns about the consent form, please let me know before we begin the interview. Once you have reviewed and signed the form, we can proceed with the interview itself.

Thank you again for your participation in this study, and I look forward to our conversation."

The topic of today interview will be: "In what ways does Artificial Intelligence impact the consultants professional identity?"

The questions are aimed at understanding how AI is affecting the work of consultants, and how they are adapting to these changes. The questions touch on topics like job tasks, skills and training, interaction with others, and the future of the consulting industry.

Appendix B – Information sheet

Title of Study: The Impact of Artificial Intelligence on consultant professional identity.

Investigator(s): Henry David Kurzhals

Introduction:

You are being invited to participate in a research study exploring the impact of artificial intelligence (AI) on the consultant professional identity. This consent form will provide you with information about the study and your rights as a participant. Please read this form carefully and take as much time as you need to decide whether or not to participate.

Purpose of the Study:

The purpose of this study is to explore how the increasing use of AI technology is impacting the consultant professional identity.

Procedures:

As a participant in this study, you will be asked to participate in an online interview that will be conducted through Microsoft Teams. The interview will be audio-recorded for the purpose of transcribing your responses. The interview will last approximately 45-60 minutes. The interview will focus on your experience as a consultant and how AI technology has impacted your professional identity as a consultant.

Confidentiality:

All information that you provide in this study will be kept strictly confidential. Your responses will be anonymized and will not be identified by name. Only the investigator(s) will have access to the data collected in this study. The audio recordings will be securely stored on a password-protected device and will be destroyed after the study has been completed.

Voluntary Participation:

Participation in this study is entirely voluntary. You are free to withdraw from the study at any time without penalty. If you decide to withdraw from the study, any data collected up to that point will be destroyed.

Risks and Benefits:

There are no foreseeable risks associated with participation in this study. However, you may find some of the questions asked during the interview to be sensitive or personal in nature. You may benefit from the opportunity to reflect on your experience as a consultant and to share your thoughts and opinions with the investigator.

Contact Information:

If you have any questions about the study or your participation, please contact the investigator at +49 15154817639 or at <u>h.d.kurzhals@student.utwente.nl</u>. If you have any questions about your rights as a research participant, you may contact the Institutional Review Board at <u>ethicscommittee-bms@utwente.nl</u>.

In order to provide context for the findings of the study and allow for a better understanding of how different demographics may be impacted by AI in the workplace, these demographic questions are being presented to you. Answering them would be benefitting the quality of this study.

Demographic questions

- 1) What is your gender?
- 2) What is your age?
- 3) What is your current position in the company?
- 4) How many years of experience do you have as a consultant?
- 5) What is your highest level of education?

Appendix C – Consent form

Informed consent form

Consent Form for "The application of Artificial Intelligence in the Consulting business"

YOU WILL BE GIVEN A COPY OF THIS INFORMED CONSENT FORM

Please tick the appropriate boxes	Yes	No
Taking part in the study		
I have read and understood the study information dated [01/05/2023], or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.		
I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.		
I understand that taking part in the study involves an audio-recorded online interview as well as a short questionnaire, whereby the audio recordings will be transcribed in text form and after the research is done, destroyed.		
Use of the information in the study		
I understand that the information I provide will be used for a Master thesis final report		
I understand that personal information collected about me that can identify me, such as any demographic information asked in the questionnaire or any information asked in the interview, will not be shared beyond the study team.		
I agree that my information can be quoted in research outputs		
I agree to be audio recorded. Yes/no		
Future use and reuse of the information by others		
I give permission for the data that I provide, which will be in the form of an anonymized audio transcript, to be archived in the University of Twente Master thesis repository so it can be used for future research and learning.		

Signatures

Name of participant [printed]

Signature

Date

I have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.

Researcher name [printed]	Signature	Date
., .	U	

Study contact details for further information:

If you have any questions about the study or your participation, please contact the investigator Henry David Kurzhals at +49 15154817639 or at <u>h.d.kurzhals@student.utwente.nl</u>.

Contact Information for Questions about Your Rights as a Research Participant

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Secretary of the Ethics Committee/domain Humanities & Social Sciences of the Faculty of Behavioural, Management and Social Sciences at the University of Twente by <u>ethicscommittee-hss@utwente.nl</u>

Appendix D – Interview Questions

Themes	Sub-themes	Questions		
Work of consultants	Consulting	Can you briefly describe your job as a		
	profession	consultant?		
		What are skills, values, and traits a		
		consultant should have?		
		How do you see yourself working as a		
		consultant? (How do you envision/imagine		
		your work as a consultant)		
AI Knowledge about A		How familiar are you with the concept of		
		Artificial Intelligence (AI)? Please describe		
		what the term means to you.		

		Could you please describe examples of AI
		technologies that you use in your work?
	Necessary skills to	To what extent have you received any
	use Al	training or education on how to use AI in
		your work?
		In your opinion, what skills or qualities do
		consultants need to develop in order to
		succeed in an industry where AI is
		becoming increasingly important?
	Downsides of AI	Can you discuss any concerns or fears you
		have about the use of AI in your work?
		Can you name advantages and
		disadvantages of using AI in consulting?
	Future of consulting	How do you see the importance of AI in
		consulting in the future?
Professional identity	Changes in	To what extent has your understanding of
	understanding of	what it means to be a consultant changed
	what it means to be	as a result of working with AI?
	a consultant due to	
	working with AI	
	Impact of AI on	How do you think AI impacts the consultant
	consultants' job	professional identity? (Now and in the
		future)
		In what ways do you think AI is changing
		the way that clients perceive consultants
		and the value they bring to the table?
	Impact of AI on	How has the integration of AI into your
	consultants	work impacted your sense of professional
	professional identity	identity as a consultant?
		In what ways can consultants leverage AI to
		enhance their skills and expertise? How
		does this impact the consultant's sense of
		professional identity
		Have you had to redefine or shift your
		professional identity in any way to
		incorporate AI into your work as a
		consultant?

Probing questions (if necessary):

- A) Can you elaborate on that point a bit more?
- B) Can you provide an example of what you mean?
- C) How did that make you feel?
- D) Can you tell me more about how you approached that particular project?
- E) How do you see this trend evolving in the future?
- F) Why do you think so?